

# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 01/20/2021		2. CONTRACT NO. (If any) 68HERC20D0016		6. SHIP TO: a. NAME OF CONSIGNEE CAD	
3. ORDER NO. 68HERC21F0095		4. REQUISITION/REFERENCE NO. PR-R5-20-00445			
5. ISSUING OFFICE (Address correspondence to) CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001				b. STREET ADDRESS US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136	
				c. CITY Cincinnati	e. ZIP CODE 45268-0001
7. TO: Andrew Parker				f. SHIP VIA	
a. NAME OF CONTRACTOR TETRA TECH, INC.				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
c. STREET ADDRESS 10306 EATON PL STE 340				Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY FAIRFAX		e. STATE VA	f. ZIP CODE 220302201		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OW	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					
12. F.O.B. POINT					
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 05/25/2022	
a. INSPECTION Destination	b. ACCEPTANCE Destination			16. DISCOUNT TERMS	

## 17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 198549560 TOCOR: Christine Urban Invoice Approver: Tanyan Bailey  Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$74,770.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						\$74,770.00
c. CITY Durham				d. STATE NC	e. ZIP CODE 27711		17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature)

01/20/2021

ELECTRONIC SIGNATURE

23. NAME (Typed)  
Charles K. Fischer  
TITLE: CONTRACTING/ORDERING OFFICER

## ORDER FOR SUPPLIES OR SERVICES

PAGE NO

## SCHEDULE - CONTINUATION

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER		CONTRACT NO.			ORDER NO.	
01/20/2021		68HERC20D0016			68HERC21F0095	
ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
(a)	(b)	(c)	(d)	(e)	(f)	(g)
0001	<p>Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 11/20/2020 to 05/25/2022</p> <p>Illinois Vermillion River Total Maximum Daily Loads (TMDL). Contract Type: Firm-Fixed Price. The Contractor shall perform requirements in accordance with Attachment 1 (Performance Work Statement) and Attachment 2 (Quality Assurance Surveillance Plan).</p> <p>Accounting Info: 20-21-B-05P-000BD4-2505-2005PFX503-001 BFY: 20 EFY: 21 Fund: B Budget Org: 05P Program (PRC): 000BD4 Budget (BOC): 2505 DCN - Line ID: 2005PFX503-001 Funding Flag: Partial Funded: \$74,770.00</p>				74,770.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$74,770.00

**PERFORMANCE WORK STATEMENT**

**CONTRACT 68HERC20D0016  
TASK ORDER 68HERC20F0414**

**A. TITLE:** Illinois Vermillion River TMDL

**B. PERIOD OF PERFORMANCE:** Task Order Award through May 25, 2022.

**TASK ORDER CONTRACT OFFICER REPRESENTATIVE (TOCOR):**

Christine Urban

U.S. EPA

Phone: 312-886-3493

E-mail: urban.christine@epa.gov

**ALTERNATE**

**TASK ORDER CONTRACT OFFICER REPRESENTATIVE (Alt-COR)**

Donna Keclik

U.S. EPA

Phone 312-886-6766

E-mail: keclik.donna@epa.gov

**C. PURPOSE AND SCOPE**

The Vermilion River (Illinois Basin) Watershed is located in upper central Illinois and drains approximately 520 miles of streams into the Illinois River. In 2009 a draft Total Maximum Daily Loads (TMDLs) was completed to address three stream segments comprising 47 miles of streams in this watershed impaired for public water supply use with nitrate as a cause. At that time, one of these segments was also impaired for Primary Contact Use (Swimming Use) with fecal coliform as a cause. Refer to Section 3 of the 2009 report for more information on water quality standards. This Performance Work Statement describes the tasks needed to complete the project's purpose which is to update and complete the Vermillion River TMDL to reflect current data and impairment status. The project will take advantage of existing data and completed portions of the Illinois Vermillion River TMDL, Phase 3 Report (IEPA 2009). For example, the base discussion of watershed characterization and source identification sections, general descriptions of analysis tools, Clean Water Act (CWA) and state implementation programs.

This TMDL project is part of the Illinois TMDL Vision - Short-Term Goal<sup>1</sup> which can be found at: <https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/303d-list.aspx>.

The 8-Digit Hydrologic Unit Code or "HUC" for the Vermilion River Watershed is 07130002 which includes parts of seven counties (refer to Table 1). The waters of the Vermillion River flow into the Illinois River (see Figure 3). The water segments that are the focus of this TMDL are mainstem segments DS-06, DS-10 and DS-14 which are impaired for Public Water Supply Use with nitrate, nitrogen as a cause, and DS07 impaired for Primary Contact Recreation with fecal coliform as a cause. Segment DS-06 is also impaired for Primary Contact Use (Swimming) with fecal coliform as a cause.

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<sup>1</sup> Refer to Appendix A-5, Table 1, #9 & Table 3, #9, in the DRAFT 2018 Integrated Report.

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Segment IL\_DSQC-01 (Kelly Creek) is not part of the mainstem, and it is impaired for Aquatic Life Use due to iron. The Illinois 2016 303(d) List included these 6 Vermillion River impairments identified above which are impaired due to fecal coliform (2), nitrogen, nitrate (3), and iron (1). These waters are listed for consideration in costing this PWS and for Scoping TMDL development in Table 1 of this PWS.<sup>2</sup>

Table 1. Waterbody Impairments for the Illinois Vermillion River TMDL Study

HUC 10	Water ID	Water Name	Miles/ Acres	Designated Use	Potential Cause(s)
0713000203	IL_DS-06	Vermilion R.	14.14	Primary Contact Recreation	<b>Fecal Coliform (1)</b>
0713000203	IL_DS-06	Vermilion R.	14.14	Public Water Supply	<b>Nitrogen, Nitrate (1)</b>
0713000208	IL_DS-10	Vermilion R.	15.44	Public Water Supply	<b>Nitrogen, Nitrate (1)</b>
0713000206	IL_DS-14	Vermilion R.	17.33	Public Water Supply	<b>Nitrogen, Nitrate (1)</b>
0713000209	IL_DS-07	Vermillion R.	26.38	Primary Contact Recreation	<b>Fecal (1)</b>
0713000201	IL_DSQC-01	Kelly Creek	11.11	Aquatic Life	<b>Iron (1)</b>

The primary tasks for the Vermillion River TMDL will include: organizing the project kick off conference call; completing a Quality Assurance Project Plan (QAPP); developing a Technical Approach Memo (TAM) describing how the 2009 Stage 3 Vermillion River Report data and modeling should be updated to complete the TMDL, obtaining the data, information and any existing modeling that was completed for the previous effort; identifying and obtaining any new data for the TMDL segments; performing any necessary modeling on the combined information to complete a revised TMDL calculation; calculate prescribed source allocations to identified point and nonpoint sources of nitrate, nitrogen and fecal coliform and iron with guidance from Illinois EPA; ensure that all necessary TMDL components including margin of safety (MOS), seasonal variation, reasonable assurance and relevant implementation options are updated and described to satisfy Illinois EPA and EPA requirements and guidelines; and complete a draft public notice version and final TMDL for the project.

The contractor will work with EPA TOCOR and Illinois EPA to determine if the data that was used to develop the 2009 TMDL is available and consider the impact to the project of any changes in data format, processing, handling, or analysis or any other approach used in the TMDL. The contractor shall document the impact of these changes in the TAM as further described in Task 4 of this PWS

The contractor shall develop TMDLs to address impairments to the Vermillion River segments in Table 1 of this document, on the most recently approved Illinois TMDL List, as of the award of this Task Order, Information for the Vermillion River TMDL can be found at:

<https://www2.illinois.gov/epa/Documents/iepa/water-quality/watershed-management/tmdls/2016/303-d-list/iwq-report-surface-water.pdf>

<sup>2</sup> The 2016 Illinois TMDL list and supporting documents can be found on the Illinois EPA website at: <https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/303d-list.aspx>



The contractor may assume for the purpose of estimating costs, that the revised Vermillion River TMDL will use methods used in the original draft TMDL<sup>3</sup> document, i.e., load and water quality duration curves (and supporting methodologies). Another product of the of the TMDL project will be computer disks or other storage device containing the available data formatted for Illinois EPA to use in future TMDL, modeling or watershed analysis efforts.

This project will use information collected in Task 3 to revise the 2009 Illinois EPA Total Maximum Daily Loads (TMDLs) for E. Coli and nitrogen, nitrate and develop an iron TMDL for the Vermillion River. The contractor shall develop a Draft Public Notice, and Final TMDL documents, and shall accomplish the following: characterize current water quality, identify point and nonpoint sources and estimate current E. coli, nitrogen, nitrate, and iron contributions from identifiable sources, describe the link between the identified sources and water quality, develop the TMDL, Waste Load Allocations, and Load Allocations, and Margin of Safety; consider seasonality and critical conditions; and describe the E. Coli and nitrogen, nitrate and iron reductions necessary to achieve applicable Illinois Water Quality Standards to assure all designated uses are achieved.

## **D. TASKS**

### **TASK 1: KICK-OFF CALL AND MONTHLY PROGRESS REPORTS**

The contractor shall schedule a kick-off call with the EPA to review overall goals of the project and details regarding implementation of the Task Order (TO). Roles and responsibilities for completing the tasks below will be discussed. The kick-off call shall be scheduled within 10 working days of award at a mutually agreed upon time. During the kick-off call the contractor and EPA TOCOR will schedule monthly technical calls.

The contractor shall write and submit monthly progress reports via e-mail to the EPA TOCOR until the completion of the project. Progress reports shall describe completed work during the invoice period and should link to charges described in invoice documentation. The monthly progress reports shall provide the following information:

- Contract and TO number, reporting period, and contact information: This information serves as heading to the report;
- Progress made during the report period: Activities completed toward completion of deliverables, including those regarding quality assurance;
- Deliverables: Schedule showing completed and upcoming deliverables;
- Projected activity for the next reporting period: Activities to be completed toward completion of deliverables;
- Project variances and outstanding issues: Describe deviations from work schedules, budget and any impediments encountered along with how they were or will be resolved;
- Subcontracting: Provide an update on subcontractor use; and
- QA Activity: QA items such as QA activities performed to support all major deliverables (e.g., Technical Support Documents, Study Reports, Study Plans, etc.) produced by the Contractor, problems encountered, QAPP deviations, and corrective actions taken.

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<sup>3</sup> Document attached.

- **Financial status:** Information on financial status, including level of effort hours and cost for the reporting period, in addition to a breakdown of level of effort hours and cost by activity, accumulated costs to date, and available funds remaining.

The EPA TOCOR may also initiate verbal communications with the contractor on an as needed basis to determine project status.

## **TASK 2: QUALITY ASSURANCE PROJECT PLAN (QAPP) DEVELOPMENT AND IMPLEMENTATION**

To the extent possible, the contractor shall write deliverables using the active voice and fonts that are acceptable to EPA and Illinois EPA. The contractor shall clearly describe the type of data to be collected, generated, or used under this task order, as well as project objectives and quality objectives needed to support them.

The project QAPP shall address how the contractor will ensure quality in their evaluation of secondary data sources necessary to develop the TMDLs, such as identifying and evaluating existing water quality and flow data, pollutant loading model results, and desktop analyses of pollutant sources. General information regarding IEPA data quality assurance can be found at <http://www.epa.state.il.us/water/water-quality/guidance.html#Data/>. Development of the TMDLs will rely on existing water quality data and studies. The contractor shall conduct an inventory identifying existing data and information following the IEPA's QA guidance, and shall incorporate QA for the inventory in the overall project Quality Assurance Project Plan (QAPP). IEPA requires that data plans be prepared in accordance with the U.S. Environmental Protection Agency's document EPA QA/R-5, EPA Requirements for Quality Assurance Project Plans, March 2001. This document can be viewed and downloaded from the [EPA web site](http://www.epa.state.il.us/water/water-quality/guidance.html#Data/). Included in the QAPP shall be a statement that the contractor shall immediately notify the EPA TOCOR of any QA problems encountered that may impact the performance of this Task Order, with recommendations for corrective action, or actions taken. The contractor shall provide a Draft QAPP to EPA TOCOR for review by TOCOR and Illinois EPA. EPA TOCOR and Illinois EPA via EPA TOCOR will provide preliminary written comments back to the Contractor for all items within 14 days unless otherwise specified. Contractor shall incorporate written comments within 16 business days of receipt of EPA's final comments from EPA QA personnel on the draft QAPP. All QA documentation, including the QAPP, prepared under this Task Order, shall be considered non-proprietary, and shall be made available to the public upon request. The draft and final QAPPs shall be delivered within the time frame set forth in the schedule found in Section D of this PWS.

After Final approval of the QAPP, the contractor shall notify the EPA TOCOR at any time during duration of the task order if changes to the QAPPs are warranted (e.g., due to organizational changes, revised technical approaches). If, during the Period of Performance of this TO, the EPA TOCOR provides technical direction that revisions to the QAPP are determined to be necessary, the contractor shall submit a revised QAPP, including the revision summary, within 30 business days after receiving written technical direction to do so. EPA TOCOR will review the "draft" revised QAPP and provide the contractor with written comments within 14 days. Final approval from EPA will be upon contractor addressing all EPA QA comments, with a goal of 60 days after submission unless otherwise described by TOCOR.

EPA policy requires that an *approved* Quality Assurance Project Plan (QAPP) be in place before any work begins that involves the collection, generation, evaluation, analysis or use of environmental data. The contractor shall perform quality assurance and quality control activities to produce results that are documented and are of the type, quality, transparency, and reproducibility consistent with EPA and IEPA guidance: *EPA Requirements for Quality Assurance Project Plans: EPA QA/R-5 60* (<http://www.epa.gov/quality/qs-docs/r5-final.pdf>)

Deliverables: QAPP, monthly QA updates.

### **TASK 3: DEVELOP A TECHNICAL MEMORANDUM THAT IDENTIFIES NEEDED TMDL DATA AND APPROACH UPDATES**

#### TMDL Data Updates

The contractor shall develop a Technical Approach Memo that will be divided into 2 sections. Section one, the Data and Information Inventory will contain an evaluation of the available pre 2009 data used for the Stage 3 Vermilion River TMDL, available new data, and the usability of the combined existing data for the TMDL; and a description of changes that will require adjustments to the basic watershed and other information in the 2009 TMDL, analyses methodologies (such as lab detection limits), State standards or State TMDL assessment and listing guidance, or any other factors that may have changed since the Stage 3 report was published that may affect the TMDL update process.

Section 2 of the TAM will be the TMDL Development Approach, which will evaluate the modeling approaches and models used in the Phase 3 TMDL Report and their applicability to each of the contaminants and the characteristics of the waterbodies to be assessed. The Contractor shall identify the adjustments that might be needed to accommodate any changes needed in the approach for the TMDL. Contractor shall also confirm if a Load Duration Curve approach is appropriate for iron and E. Coli., and other approaches used in the Stage 3 TMDL for E.coli and nitrogen, nitrate, TMDLs. A list of TMDL required elements for TMDL approval can be found in Appendix A of this PWS and Federal guidance and requirements.

The contractor shall present recommended changes to the 2009 TMDL for EPA TOCOR and Illinois EPA approval prior to revising the TMDL. This technical approach shall take into account the contractor's assessment of available data, applicable tools and models, and additional data requirements, and a recommendation on how to proceed with finalizing the TMDLs for E. coli and Nitrogen, Nitrates.

#### Details of Technical Approach Memo Contents

As a minimum, the Technical Memorandum shall contain the information described below:

##### 3.1. Draft Data and Information Inventory Section

The contractor shall evaluate the state of existing data and information necessary to complete TMDLs and suggest filling gaps with water quality data and information that may be available from organizations with comparable metadata such as the state Department of Natural Resources (DNR) or US Geological Survey (USGS), in consultation with EPA TOCOR and Illinois EPA. The contractor shall keep the TOCOR apprised of these contacts and data collected. The contractor shall ensure that all data collected is consistent with the project QAPP. The Technical Memorandum shall describe the data available to identify and update the nonpoint and point sources and loads, of E. coli and Nitrogen Nitrates, and for iron. The

## Attachment 1 – PWS

contractor shall identify any gaps in the data or analytics needed to identify and characterize the contaminant loads to waters from these sources (i.e., industrial, municipal and regulated stormwater discharges (MS4s), and septic systems, livestock operations and other sources identified in the Phase 3 TMDL document) utilizing the water quality duration curves and Storm Water Management Model (SWMM) modeling efforts identified in the original Phase 3 TMDL document. The contractor will include a table in the Draft Technical Memorandum that summarizes all the collated data. Contractor shall describe the available data review and data gap identification. The memo shall contain:

- A chart presenting the basis for each waterbody listed, the impairment and listing criteria
- Information identified as a result of efforts related to the Task Order (A summary chart grouping the types, amounts, and year that information was collected, and any issues related to its usability.
- Identification of data gaps in available inventories and any source categories not quantified. Contractor shall include discussion of source categories with small amount of data for further consultation with EPA COR Illinois EPA;

### Watershed Characterization:

- A description of watershed characteristics such as land-use; physical and social factors that might influence loads to of Illinois that are selected for this TMDL; and how known and potential sources contribute to the impairments in these waters. Watershed Characterization data and descriptions used in completing A discussion for any spatial and temporal trends that are relevant to formulating the approach for TMDLs for E. Coli and nitrogen, nitrate and iron should be included with the evaluation of the state of Illinois monitoring data, (explanation of how data supports trend conclusions);
- Maps or graphs showing groupings of water body characteristics that are relevant to these TMDLs, and the common attributes of the waterbody watershed factors such as: land use, physical differences such as geology or soil, chemical concentration ranges for each contaminant, source types and location,
- A revised relevant water quality standard description language for TMDL. Information about the linkage between water quality and pollutant sources targets used to support the TMDL Targets
- A review and update of the Phase 3 Report source analysis to support any revised impaired water body targets and/or reductions;
- Maps and/or other graphics visuals that may need to be updated such as: land use properties, source locations and loading distribution, and/or ecoregions).
- A proposed update of the Phase 3 report language identifying baseline concentrations and targets
- A description of the approach to setting targets that account for geographic, chemical, loading and temporal variability (observed longitudinal, seasonal and year-to-year patterns). , and the rationale for setting proposed target levels

The draft Data and Information Inventory Section of the memo shall be ready for review and delivered within the time frame set forth in the schedule found in Section D of this PWS. The EPA TOCOR and Illinois EPA will provide comments within 14 calendar days and questions which shall be addressed by Contractor within 14 calendar days.

### 3.2 Draft TMDL Development Approach Section

Contractor shall revise the development approaches, source assessment, and target setting methods and allocation approaches from IEPA 2009 TMDL for *E. coli* and *Nitrogen Nitrate TMDLs Phase 3*, and provide a summary of these revisions in Technical Memorandum. Contractor shall use the updated information from the data evaluation described in Section 3.1 above to the extent possible. Contractor shall propose and detailed information on a recommended TMDL approach.

- An evaluation of the 2009 TMDL models, or other quantification approaches to linking sources with impaired segments, along with a confirmation of the applicability and suitability of the approach for the current study, given the existing and available data for the updated TMDL.
- Develop maps and/or other graphics and loading distribution.
- A description of how numeric TMDL targets will be revised utilizing existing data
- A description of how seasonal variation, margin of safety and daily loads would be addressed in the proposed approaches.
- Documentation of any important assumptions or information that would be used for each approach and model used, and their strengths and limitations.

The draft TMDL Development Approach portion of the TAM shall be delivered by the contractor within the time frame set forth in the schedule found in Section D of this PWS. Unless otherwise specified EPA TOCOR and Illinois EPA through EPA TOCOR, will provide comments within 14 calendar days and questions which shall be addressed by Contractor within 16 calendar days.

The final Technical Approach memo and final Section 2

EPA TOCOR and Illinois EPA will discuss the findings of Section 1 and 2 of the TAM through monthly phone calls, and select a preferred approach, and request additional documentation be included in the Final Technical Approach Memorandum. The FINAL TAM shall be delivered by the contractor within the time frame set forth in the schedule found in Section D of this PWS. Unless otherwise specified EPATOCOR and Illinois EPA will provide comments within 14 calendar days and questions which shall be addressed by Contractor within 16 calendar days.

Deliverables: The Technical Approach Memorandum.

Data shall be provided to the EPA TOCOR and Illinois EPA on appropriate storage device within 30 days of completion of final TMDL Report.

## **TASK 4: DEVELOP A REVISED TMDL FOR THE VERMILION RIVER PROJECT AREA.**

Contractor shall take data, models, and tools available to estimate loads and sources for the Vermilion River TMDL and assist the EPA TOCOR and Illinois EPA in the development of a revised TMDL document, addressing E. Coli and Nitrogen Nitrate, and Iron impairments based upon information in the TAM. These TMDLs shall allocate pollutant source loads to point and nonpoint sources within the selected Vermilion River TMDL project area. This involves establishing loading capacities for impaired waterbody segments that will meet applicable water quality standards or targets, evaluating options that reduce source loads, identifying a margin of safety, developing allocations, and preparing the TMDL document that includes the required components listed in Appendix A. Based on the Data inventory, contractor will be required to update the potential pollutant source contributions assessment

portions of the TMDL for the segments identified in the Table 1 of this PWS. The contractor may assume for the purpose of estimating costs of TMDL development, that the revised Vermillion River TMDL will use the methods in the original draft TMDL<sup>4</sup> document, i.e., LDCs (and supporting methodologies).

**4.1. Pre-Public Notice Draft TMDL report** Contractor shall prepare pre-Public Notice Draft TMDL that is technically sound, clearly presented, meets all regulatory requirements, and contains components described in Appendix A. The contractor's approach shall utilize existing data and EPA and Illinois EPA-approved guidance and policies, or methodologies. The Pre-Public Notice Draft TMDL shall assimilate the data, information and approaches from the Stage 3 Vermillion River TMDL and the TAM evaluation as approved by EPA TOCOR and Illinois EPA to develop an understandable and complete pre-Public Notice Draft TMDL report with approvable TMDL elements of an (as described in Appendix A). The Pre-Public Notice Draft TMDL shall include all maps, tables and diagrams. The contractor shall furnish all deliverables to the EPA TOCOR in an electronic format that EPA and Illinois EPA can support (MS Word). This deliverable shall be delivered by the contractor within the time frame set forth in the schedule found in Section D of this PWS. Unless otherwise specified EPA TOCOR and Illinois EPA will provide comments within 14 calendar days and questions which shall be addressed by Contractor within 16 calendar days.

*Interim Deliverable:* Contractor develops a preliminary draft TMDL (i.e., a Pre-Public Notice Draft TMDL) for EPA TOCOR and Illinois EPA on a date agreed upon by EPA TOCOR and Illinois EPA, within 474 days of TO award.

**4.2. EPA Public Notice Draft TMDL Report**

The Public Notice Draft TMDL report shall include all elements of an approvable TMDL as well as final TMDL allocations. NPDES facilities and sources shall receive individual wasteload allocations under this TMDL that shall be available for the Public Notice version of the TMDL. The contractor shall reference research, websites, and background information for works cited so that EPA TOCOR and Illinois EPA can verify information to answer stakeholder questions, and for administrative record-keeping. The contractor shall furnish all deliverables to the EPA TOCOR in an electronic format that EPA and Illinois EPA can support (MS Word). The deliverable shall be delivered by the contractor within the time frame set forth in the schedule found in Section D of this PWS. Unless otherwise specified EPA TOCOR and Illinois EPA will provide comments within 14 calendar days and questions which shall be addressed by Contractor within 16 calendar days.

*Interim Deliverable:* Contractor develops a draft TMDL (i.e., Public Notice Draft TMDL) for EPA TOCOR and Illinois EPA on a date agreed upon by EPA TOCOR and Illinois EPA, within of award.

**Task 4.3: Final TMDL**

The contractor shall assist EPA TOCOR and Illinois EPA in addressing public comments on the Public Notice Draft TMDL report. The contractor shall provide technical support in developing responses to comments submitted during the public notice and comment period of the Public Notice Draft TMDL report. The contractor shall prepare draft responses to public comments on the technical data and methods with input from EPA TOCOR, in consultation with Illinois EPA. Illinois EPA will provide responses to policy issues and finalize the responses to public comments. The responses to public

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<sup>4</sup> Document attached.



comments shall be a part of the Appendix in the final TMDL. The contractor shall aid EPA in assembling the files necessary to create an Administrative Record, by tracking the documentation, background information, and websites for detailed responses. The EPA TOCOR defines the final TMDL deliverable as the draft that requires no further modification of text, tables or figures. The contractor shall furnish all deliverables to the EPA TOCOR in an electronic format that EPA and IEPA can support (MS Word).

The contractor shall produce a draft Final TMDL incorporating EPA TOCOR and Illinois EPA responses to public comments as requested by the EPA TOCOR. EPA TOCOR and Illinois EPA will provide comments on the work product within 14 calendar days and questions which shall be addressed by Contractor within 16 calendar days.

The Final TMDL work product shall incorporate comments and corrections and shall be provided by the contractor to the EPA TOCOR by the timeframes for completion found in Section D of this PWS.

*Final Deliverables:* A final Vermillion River TMDL.

This date may be adjusted to take into account a later award date or any unscheduled delays if agreed upon by contractor, the EPA TOCOR and Illinois EPA. The final draft shall be subject to FOIA and could be furnished by the EPA for wider distribution such as to state agencies, other federal agencies and stakeholder groups. The contractor shall furnish a final deliverable within five (5) business days of receiving EPA written comments on the final draft TMDL.

The final data and modeling files shall be provided to the EPA TOCOR and Illinois EPA no later than March 1, 2022.

Supporting maps and/or other graphics depicting subwatershed units, loads and sources. Contractor shall include in their estimate the creation of GIS-based maps for the report that display impaired areas, source information including legacy sites and NPDES permitted sources, water quality geographic delineations of areas included in the TMDL and other information appropriate for inclusion in the report. Unless otherwise noted in this PWS, maps should be most representative of current conditions. Uncertainty of sources and knowledge gaps of source loadings to the subwatersheds shall be identified. Information sources for the maps shall be displayed on maps.

## **TASK 5 PUBLIC MEETINGS**

The contractor shall participate in 2 public meetings via web-platform, to present the findings of the Technical Approach Memo, and to present the Draft Public Notice version of the TMDL. Contractor shall prepare a presentation for each meeting. The contract will propose a platform for the webinars with the following functionalities to be set up by the contractor, no travel will be expected for these Conferences. The times for these meetings will be determined by the EPA TOCOR and Illinois EPA with input from the contractor. The agendas are to be determined by the EPA TOCOR and Illinois EPA.

The meetings are intended will be official public meetings, and contractor shall be responsible for providing a method for memorializing and summarizing the meeting in writing. Comments from the public will be recorded and responded to at the meeting, or in a Responsiveness Summary of the Meeting.

The contractor shall be responsible for providing and preparation of all technical presentations including a technical summary of TMDLs. The contractor shall format handouts for IEPA to use at 2 public web meetings for the Public review and comment on the Public Notice TMDL, and provide assistance with taking notes at the meetings. Illinois EPA will be responsible for all aspects of notifying stakeholders about the meeting details via mail, email and publication in State Register, and the invitee list. EPA TOCOR and IEPA will provide the contractor with a list of interested public institutions and stakeholders. The contractor shall be prepared to present all presentations at the public meetings; however, Illinois EPA may consult with EPA and Present some or all of the material after evaluating the audience and effectiveness of delivering the material.

Specific dates for public web conferences are to be determined but it is anticipated that meetings shall occur approximately 30 days after finalizing the technical memorandum and draft Public Notice TMDL Report deliverables. The contractor will be responsible for providing the technical media software and equipment for presenting the materials, organizing and calling on individuals commenters for their remarks, and use at the public meetings. The contractor shall provide recommendations to EPA TOCOR and Illinois EPA of stakeholder groups and points of contact who Illinois EPA can consider when securing a date, time and location for the public meetings and also for distribution of public meeting announcements. The time frames for the Public Web Meeting task is set forth in the schedule found in Section D of this PWS. Unless otherwise specified EPATOCOR will provide comments within 14 calendar days of work product delivery, and comments and questions shall be addressed by Contractor within 16 calendar days.

During these public meetings and any other dealings with the public, contractor personnel shall clearly identify themselves as such. Any questions raised by the public regarding EPA or Illinois EPA policy should be responded to by EPA TOCOR or Illinois EPA representatives, respectively, not contractor personnel. If the EPA TOCOR or Illinois EPA is not available to respond, the contractor shall provide the public with an appropriate contact at the appropriate agency.

#### **TASK 6: MONTHLY WORK GROUP CONFERENCE CALLS**

Contractor shall schedule and organize monthly work group conference calls with key project team members: The EPA TOCOR, the Contractors Task Order Manager and key contract technical staff and Illinois EPA project team participants. The project team will discuss the technical details, coordinating activities to complete tasks, and questions and comments about interim project deliverables throughout the period of performance. Monthly technical call discussions should include the projected activity from the previous monthly report, and should involve all project participants participating in upcoming tasks for the next project period to the extent possible to clearly communicate upcoming tasks and to maximize the usefulness of calls and minimize miscommunications and duplicative discussions.

The monthly calls shall be scheduled at a mutually agreed upon day and time each month for the duration of the Performance Work Statement (PWS) . The contractor shall provide meeting notes for each monthly conference call in electronic mail format to call participants and the EPA TOCOR to review for completeness and correctness. The EPA TOCOR must approve other needed conference calls to complete the tasks in this PWS, for example, to collect the necessary data and information from stakeholders and other entities of local, state and federal government. Whenever possible the



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contractor shall use the monthly calls to get the EPA TOCOR's pre-approval for needed communications involving technical clarification outside of the EPA TOCOR's and Illinois EPA's presence. Otherwise, the contractor shall notify the EPA TOCOR via email within a week of the call and identify the contact person and topic discussed. Should any controversial issue arise, or any topic that could relate to a potential change in the scope of work or budget, the EPA COR shall be notified at the earliest opportunity. The contractor at no time shall take any technical direction from anyone other than the EPA TOCOR.

### E. SCHEDULE OF BENCHMARKS & DELIVERABLES:

**Note:** Unless otherwise specified in this schedule, EPA TOCOR shall provide written comments on all draft deliverables within 14 business days of receipt of EPA's receipt of deliverables. Unless otherwise specified, Contractor shall incorporate written comments and provide revisions to EPA TOCOR within 16 business days of receipt of EPA TOCOR's comments.

Task # or PWS Section #	BENCHMARK, DELIVERABLE or MILESTONE	SCHEDULE	Within Days of Award
1	Kickoff Phone Call Monthly Progress Reports	Phone call w/in 10 business days of the TO award. Monthly progress reports be submitted to TOCOR within three (3) calendar days of invoice submission to EPA.	10
2	Develops <u>Draft QAPP</u> and furnishes to TOCOR for review and comment by TOCOR and IEPA QA Officer.	Within 40 calendar days after Task Order award, or an alternate date as agreed upon by EPA and IEPA. Draft QAPP will then go to EPA QA Officer with comments.	40
2	Contractor develops <u>Final QAPP</u> for signature after receiving written comments from EPA, IEPA.	Within 95 calendar days after the submittal of the revised draft QAPP to TOCOR or an alternate date as agreed upon by EPA and IEPA.	95
3	Draft <u>Section 1 of TAM: Data and information Inventory Report</u> provided to TOCOR for review and comment	Within 170 days Provide draft <u>Section 1 revised Data and Information Inventory</u> for TOCOR and IEPA review and comment.	170
3	Draft <u>Section 2 of TAM: revised TMDL Development Approach Report</u> provided to TOCOR	Within 230 calendar days after TO award, deliver <u>Section 2 of TAM: revised TMDL Development Approach Report</u> for TOCOR and IEPA review and comment.	230
3	Deliver Consolidated Final <u>revised TMDL Technical Approach Memo to TOCOR</u> -	Within 260 calendar days after TO award, provide <u>revised Final TMDL Technical Approach Memo</u>	260
4	Contractor develops <u>preliminary draft TMDL</u> and furnishes to TOCOR for review and comment by TOCOR and IEPA.	Within 320 days of TO award, Preliminary draft TMDL for TOCOR and IEPA review and comment.	320
4	TMDL development: Contractor develops <u>draft TMDL (TMDL ready for public notice)</u> and	Within 360 days of TO award, Public notice draft TMDL for TOCOR and IEPA review and comment.	360

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	furnishes to TOCOR for review and comment by TOCOR and IEPA.		
4	Contractor develops <u>draft Final TMDL</u>	Within 460 days of TO award, and after public notice meeting, contractor delivers draft final TMDL including incorporated changes and response summary from public web meeting.	460
4	Contractor delivers <u>Final Illinois Vermillion River TMDL</u>	Within 490 days of TO award, and after public notice meeting, contractor delivers Final TMDL	490
5	Contractor prepares <u>draft presentation and supporting materials</u> for Public Notice Web Meeting	Draft materials for presentations and materials for web meeting and proposes a method for conducting the meeting over the internet.	390
5	Support EPA and IEPA for 2 official public web meetings for public notice version of TMDL	Meetings to be set at a mutually agreed time by EPA, IEPA and contractors. Materials and presentations delivered for public meetings as directed by TOCOR delivered at least one week before public meeting but no later than 420 days after award	420
6	Contractor participates in Monthly Work Group Conference Calls	Monthly Work Group calls shall begin within 30 days after the kickoff call and occur at a minimum of once a month.	monthly

### F. DELIVERABLES

1. For each deliverable submitted electronically, the contractor shall submit electronic copies to both EPA and IEPA in a format that EPA can support. Deliverables shall be submitted through electronic mail, or through another method determined mutually acceptable by the contractor and EPA.
2. For each deliverable submitted as a hard copy, such as the final report, the contractor shall submit two (2) hard copies to the EPA TOCOR. Electronic copies of all hard copy deliverables shall be made available to EPA in Microsoft Word and PDF formats.
3. Each deliverable shall be submitted in draft by the initial due date unless otherwise noted in this PWS. The EPA TOCOR will review the draft deliverables and provide comments. The contractor shall respond to these comments within seven (7) workdays unless otherwise specified in this PWS or otherwise directed by the EPA TOCOR. Initial response to comments can be through electronic mail. Deliverables shall be revised upon direction from the EPA TOCOR within a time frame mutually agreed upon by the EPA TOCOR and the contractor, but within at least three (3) work days and no more than 30 work days. The EPA TOCOR will determine whether a deliverable is in an approvable and/or acceptable form. The EPA TOCOR's determination will be based on the contractor's clarifications and/or revisions, including any necessary re-submittals. Written technical direction from the EPA TOCOR can be through electronic mail.
4. At the completion of the period of performance, or as requested throughout, the contractor shall provide electronic copies of all project files to EPA in Flash Drive format. Modeling data files shall be made available on an FTP site for the duration of 60 days after the last deliverable is accepted by TOCOR.

## **G. REPORTING**

All documentation and reporting under this Task Order shall be in compliance with contract requirements. Reference Contract Clause C-1 (c) and Attachment 1, PWS, Section 2.5.3.4, 3.7, and 4.3.7. See contract clause F.2, F.3, and J.2 “List of Attachments, Number 2 - Reports of Work”.

## **H. ANTICIPATED TRAVEL**

All travel under this Task Order shall be in compliance with contract requirements. However, no travel is currently expected for this project.

## **I. CONTRACTOR IDENTIFICATION**

Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency’s official representative.

Any questions raised by the public regarding EPA policy should be responded to by EPA representatives, not contractor personnel. If EPA is not available to respond, the contractor shall provide the public with an appropriate agency contact.

## **J. VALIDATION OF TASK ORDER DELIVERABLES FOR SECTION 508 COMPLIANCE**

The Contractor shall support the TOCOR in conducting a “Final Deliverable Validation” to ensure compliance with Section 508 and the Federal Acquisition Regulations (FAR) related to “ electronic and information technology (EIT) deliverables”. The contractor shall furnish certification, in writing, to the TOCOR that the Contractor has complied with EPAAR Clause 1552.211-79 “Compliance with EPA Policies for Information Resources Management” (Reference Contract Clause C-1), including the requirement that all electronic and information technology (EIT) deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/> Reference Contract Clause C-1 (c) and Attachment 1, PWS, Section 2.5.3.4, 3.7, and 4.3.7.

## **K. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS**

No single event under this Task Order is anticipated to incur \$20,000 or more in cost. The contractor shall immediately notify the EPA Contracting Officer, Project Officer (PO) and TOCOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

## **L. NOTIFICATION OF COMPLETION OF TO DELIVERABLES**

In the event that the Task Order reaches thirty (30) days prior to the end of the Period of Performance in a given period and the Contractor assesses that the deliverables, benchmarks or milestones will not be able to be completed, the Contractor shall immediately furnish written notification to the EPA TOCOR and the Contracting Officer (CO).

Within five (5) business days of receiving this written notification, the EPA TOCOR in coordination with the CO will provide written technical direction to the contractor concerning use of the funds which remain in the Task Order to prepare draft deliverables, interim work products, and any necessary working files in an electronic format which is supported by EPA, and furnish these to the EPA TOCOR.

## **M. SUPPORTING DOCUMENTS AND GUIDANCE**

The Web Documents referred to below are available in hard copy upon request.

### **SUPPORTING DOCUMENTS AND GUIDANCE**

- “*EPA Requirements for Quality Assurance Project Plans. (QA/R-5)*” EPA/240/B-01/003. May 2006. [http://www.epa.gov/quality/qa\\_docs.html#noneparqt](http://www.epa.gov/quality/qa_docs.html#noneparqt)
- “*Guidance for Quality Assurance Project Plans for Modeling (QA/G-5M).*” EPA/240/R-02/007. December 2002. [http://www.epa.gov/quality/qa\\_docs.html#noneparqt](http://www.epa.gov/quality/qa_docs.html#noneparqt)
- “*Data Quality Assessment : A Reviewer’s Guide (QA-G-9R).*” EPA/240/B-06/002. February 2006. [http://www.epa.gov/quality/qa\\_docs.html#noneparqt](http://www.epa.gov/quality/qa_docs.html#noneparqt)
- “*Data Quality Assessment: Statistical Tools for Practitioners (QA/G-9S).*” EPA/240/B-06/003. February 2006. [http://www.epa.gov/quality/qa\\_docs.html#noneparqt](http://www.epa.gov/quality/qa_docs.html#noneparqt)

## **Appendix A**

### **Additional detail on TMDL COMPONENTS**

#### **TMDL Required Components**

##### **Identify Waterbodies and Their Priority Ranking**

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Work with IEPA and EPA to finalize the list of water bodies and impairments being addressed by the TMDL from the most recently approved CWA 303(d).
- Characterize watershed by describing land-use, air sources, physical, biological, chemical and other factors that might influence pollutant loads and resulting concentrations.
- Clearly define and justify the geographic area(s) and specific water bodies covered by the TMDL, as well as sources included in the calculations, and their areas of influence considered by the TMDL.
- Create maps and/or other graphics depicting impaired assessment units, watersheds, air deposition, and other watershed characteristics that will be used to support TMDL development.

##### **Relevant Water Quality Standards & Targets**

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Provide a description of applicable WQS that the TMDL will be written to attain, including designated uses.
- Identify numeric TMDL targets and demonstrate how targets account for critical conditions and seasonality across water bodies, such that the TMDL is designed to ensure that all impaired assessment units will achieve applicable WQS. Demonstrate how the TMDL targets account for geographic and physical differences across the impaired assessment units and how the TMDL targets account for any relationships causing differences in observed longitudinal, seasonal and year-to-year patterns.
- If the TMDL targets differ from water quality standards, the TMDL needs to include a demonstration of how the TMDL targets relate to and will attain applicable water quality standards.

##### **Linkage Between Water Quality and Point and Nonpoint Sources**

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Specific to each impaired assessment unit, identify point and nonpoint sources contributing to impairments and quantify the existing contribution from sources and/or source categories specific to each impaired assessment unit. Identify the magnitude of impact on water quality from sources or combination of sources. Identify and discuss assumptions made in determining source contributions.
- Conduct analyses, supported by existing data and accepted scientific literature, to determine how known and potential pollutant sources contribute to the impairment specific to each assessment unit.

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- To the extent possible, and in accordance with the QAPP, identify source information representative of current conditions. Uncertainty of sources and knowledge gaps of source loadings to the assessment units should be identified.

### Point Sources

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Identify existing individual point sources and NPDES permitted stormwater sources, including Municipal Separate Storm Sewer Systems (MS4) jurisdictions that discharge within the selected subwatersheds of the TMDL project area, which have a known or probable impact on TMDL pollutant concentrations in the impaired assessment units.
- Provide existing individual point source loadings. When data are not available to provide individual loadings, upon concurrence from EPA, in consultation with IEPA, point source loadings can be provided for source categories or some other representative grouping of sources.
- Where applicable, provide pollutant contributions from NPDES permitted stormwater sources, Combined Sewer Overflows (CSOs) and Sanitary Sewer Overflows (SSOs). When insufficient data exist to calculate contributions from permitted stormwater sources, contributions should be estimated and an explanation of how the contributions were estimated should be provided.
- Identify any impacts to local water quality from a point source or a collection of point sources.

### Nonpoint Sources

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Identify nonpoint sources, and to the extent practicable, identify individual nonpoint sources, otherwise identify source categories or groups of similar nonpoint sources.
- Identify impacts to local water quality from a specific nonpoint source or a collection of nonpoint sources.
- Evaluate data gaps in available inventories and identify source categories not quantified. For source categories not quantified, propose methods for quantifying. Upon concurrence from EPA, in consultation with IEPA, on a proposed method, the contractor shall investigate and quantify these source categories.
- Evaluate state monitoring data, including identification of any spatial and temporal trends. Statistical analysis of available data to support trend conclusions should be provided.
- The final TMDL must address all applicable elements of an approvable TMDL as discussed in EPA's May 20, 2002 memorandum, EPA Review of 2002 Section 303(d) Lists and Guidelines for Reviewing TMDLs under Existing Regulations issued in 1992, and any other relevant EPA and IEPA TMDL guidance and policy.<sup>5</sup> The implementation and reasonable assurance portions of the TMDL should support, to the extent possible, the nine key elements critical to achieving improvements in water quality as set forth in EPA's Guidelines for the Award of Section 319 Nonpoint Source Grants to States and Territories.<sup>6</sup> EPA's expectations with regards to the nine elements are explained in Appendix C of the Clean Water Act Section 319 grants guidelines, which were revised in April 2013.

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<sup>5</sup> EPA TMDL guidance and policy can be found at <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/guidance.cfm>

<sup>6</sup> EPA guidance and policy can be found at <http://water.epa.gov/polwaste/nps/cwact.cfm>

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- EPA's Nine Minimum Elements of a watershed plan are:
- a. Identify causes and sources of pollution
- b. Estimate pollutant loading into the watershed and the expected load reductions
- c. Describe management measures that will achieve load reductions and targeted critical areas
- d. Estimate amounts of technical and financial assistance and the relevant authorities needed to implement the plan
- e. Develop an information/education component
- f. Develop a project schedule
- g. Describe interim, measurable milestones
- h. Identify indicators to measure progress
- i. Develop a monitoring component

### Loading Capacity

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Identify loading capacities and reductions needed to meet the applicable WQS, and TMDL numeric targets. Development of the loading capacities must take into account critical conditions.

### Wasteload Allocation Development

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Develop WLAs identifying the portion of the loading capacity allocated to individual existing and future point sources.
- Determine, in consultation with the EPA TOCOR and the IEPA project manager, an appropriate method for distributing wasteload allocations among area MS4s, industrial stormwater and construction stormwater sources.

### Load Allocation Development

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Develop LAs identifying the portion of the loading capacity attributed to existing and future nonpoint sources and natural background. To the extent practicable, LAs should be established for specific nonpoint sources or nonpoint source categories.

### Margin of Safety

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Identify uncertainties associated with the relationship between the pollutant loadings and the water quality of the receiving waters.
- Identify uncertainties associated with assumptions made in the development of the TMDL.
- Establish a margin of safety to address the identified uncertainties. This margin of safety can be either implicit or explicit or a combination of both. Future reserve capacity is not considered to be acceptable as MOS.

### Seasonal Variation

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Identify how seasonal variation was considered and incorporated into the development of the TMDL. If appropriate, provide justification for why seasonal variation is not significant.



### Implementation Plan

- Contractor shall identify activities and resources that are planned and available to implement reductions called for in the TMDL.
- Identify existing or future funding sources and schedules for necessary measures and actions needed to attain TMDL.

### Reasonable Assurance

Adequate reasonable assurance ensures that a TMDL's WLA and LA are properly calibrated to meet the applicable WQS. Without such calibration, a TMDL's ability to serve as an effective guidepost of water quality improvement is significantly diminished.

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Develop a reasonable assurance section to demonstrate how the TMDL allocations to the point and nonpoint sources could attain the water quality standards.
- For each management measure or control action in the Implementation Plan provide detailed information on existing and future mechanisms and entities responsible for implementation of these measures and actions.
- Identify existing and upcoming implementation efforts within the state, county or local authorities relevant to reducing point and nonpoint sources of PCBs and Mercury within the Vermillion River TMDL project area. These activities could be identified through interviews, e-mail communication, and research of white and gray literature.
- The Vermillion River TMDL project area TMDLs will have a portion of the loading capacity assigned to WLA (for example, MS4 communities, construction and industrial NPDES permitted facilities etc.) and the remaining load will be allocated to nonpoint sources (load allocations). The reasonable assurance discussion should include a sound demonstration of reduction strategies and a monitoring program to measure the progress of NPS reduction strategies within the watershed.

### Monitoring

For the Vermillion River TMDL project area TMDLs the contractor shall:

- Identify existing monitoring efforts which can be utilized to track implementation effectiveness and attainment of WQS.

Identify future monitoring efforts needed to track implementation effectiveness to attain WQS.



## ATTACHMENT 2

## QUALITY ASSURANCE SURVEILLANCE PLAN (QASP)

Contractor: Tetra Tech  
 Contract No: 68HERC20D0016  
 Task Order: 68HERC20F0414

**Purpose:** The requirements performed under this contract are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The TOCOR shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Contract Level Contracting Officer's Representative (CL-COR) in preparing the overall evaluations submitted annually in response to the CPE requirements in the contract. The TOCOR for each individual task order will provide the review of the deliverables at the location specified in the identified task order.

General Management and Administration			
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
<b>Management and Communications:</b>  The Contractor shall maintain contact with the EPA Contracting Officer (CO), Contracting Officer's Representative (COR), and Task Order COR (TOCOR) throughout performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA TOCOR. In cases where issues have a direct impact on project schedules and/or cost, the Contractor shall provide options for EPA's consideration on resolving or mitigating the impacts.	Any issues that impact project schedules and/or cost shall be brought to the attention of the appropriate EPA TOCOR within 3 business days of occurrence.	100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to identify unreported issues. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor's attention through the EPA CO.	<b>Unsatisfactory</b> rating under the category of Business Relations in the Contractors Performance Appraisal Review System (CPARS) if two or more incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.  Fewer than two incidents per contract period where the contractor does not meet the measurable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation

			System under the category of Business Relations.
<p><b>Timeliness:</b></p> <p>Services and deliverables shall be in accordance with schedules stated in each task orders, unless amended or modified by an approved EPA action.</p>	<p>During any period of performance, 90% of all submitted deliverables shall be submitted no later than one business day past the due date.</p>	<p>100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report &amp; milestones established for each deliverable) to compare actual delivery dates against the approved delivery dates. The EPA TOCOR will report any issues to the EPA COR, who will bring the issue(s) to the Contractor's attention through the EPA CO.</p>	<p><b>Unsatisfactory</b> rating under the category of Timeliness in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of <b>Timeliness</b> if the contractor meets the measurable performance standards.</p>
<p><b>Cost Management and Control:</b></p> <p>The Contractor shall monitor, track and accurately report level-of-effort, labor cost, and other direct cost to EPA through progress reports and approved special reporting requirements.</p> <p>The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate timekeeping.</p>	<p>The Contractor shall manage costs to the level of the approved ceiling on the task orders. The Contractor shall notify the EPA TOCOR/COR when 75% of the approved funding ceiling for the work assignment is reached.</p>	<p>The EPA COR will routinely meet with the Contractor's Project Manager to discuss the work progress, and the contract and individual task order expenditures. The EPA COR shall review the Contractor's Monthly Progress Reports and request the TOCOR's verification of expenditures and technical progress before authorizing invoice payments.</p>	<p><b>Unsatisfactory</b> rating under the category of Cost Control in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measurable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the Contract.</p>

<p><b>Technical Effort:</b></p> <p>The analyses or products developed by the Contractor shall be factual, defensible, and based on sound science and engineering. All data shall be collected from reputable sources; quality assurance measures shall be conducted in accordance with contract and Agency requirements, and any additional requirements outlined in individual task orders or technical directives. Any work requiring the Contractor to provide options or recommendations shall include the rationale used in selecting the option/ recommendation and all other options and recommendations considered.</p>	<p>All (100%) analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the TOCOR in written technical direction, and should meet the objectives stated in the task order. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.</p>	<p>EPA will review all analyses conducted and products prepared by the Contractor and will independently consider their merit. EPA may opt to peer review analyses to further validate their merit.</p>	<p><b>Unsatisfactory</b> rating under the category of Quality of Product or Service in the CPARS when the Contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of <b>Quality of Product or Service</b> if the contractor meets the measurable performance standards.</p>
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<p><b>Quality Assurance/Quality Control (QA/QC):</b></p> <p>The Contractor shall comply with the quality assurance requirements specified in <i>EPA Requirements for Quality Assurance Project Plans</i> (<a href="http://www.epa.gov/quality/qs-docs/r5-final.pdf">http://www.epa.gov/quality/qs-docs/r5-final.pdf</a>) and as required by the EPA TOCOR. The Contractor shall assign appropriately leveled and skilled technical and quality assurance personnel to develop a Quality Assurance Project Plan (QAPP) for all tasks requiring collection or use of environmental data.</p> <p>The QAPP shall be developed in consultation with the EPA TOCOR, and fully approved by the appropriate EPA personnel, before initiation of activities involving environmental data collection or use.</p> <p>Any change in the planned environmental data activities that become necessary during the course of the project shall be fully documented in approved revised versions of the QAPP prior to their implementation.</p>	<p>The Contractor shall notify the EPA TOCOR of any issues that impact project quality within 3 business days of occurrence.</p> <p>The Contractor shall notify the EPA TOCOR and COR within 5 business days of occurrence of any requests to collect or use environmental data without an EPA-approved QAPP.</p> <p>The Contractor shall document all QA/QC activities, including compliance with the quality objectives specified in the QAPP, in Monthly Progress Reports.</p>	<p>100% of active task orders under the contract will be reviewed by the EPA TOCOR monthly (via Monthly Progress Report) to assess contractor compliance with the approved QAPP, and to identify unreported issues related to project quality and requests to collect or use environmental data without an EPA-approved QAPP. The EPA TOCOR will report any issues to the EPA QAO and COR, who will bring the issue(s) to the Contractor's attention through the EPA CO for immediate resolution.</p>	<p><b>Unsatisfactory</b> rating under the category of Quality Assurance/Quality Control in the CPARS if more than three incidents occur during an applicable period of performance when the Contractor does not meet the measurable performance standards.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Quality Assurance/Quality Control if the contractor meets the measurable performance standards.</p>
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